Summary of WISCOUNCIL Presentation
"Labor Trends in Wisconsin and the Future of Occupational Therapy"
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Concordia University Wisconsin

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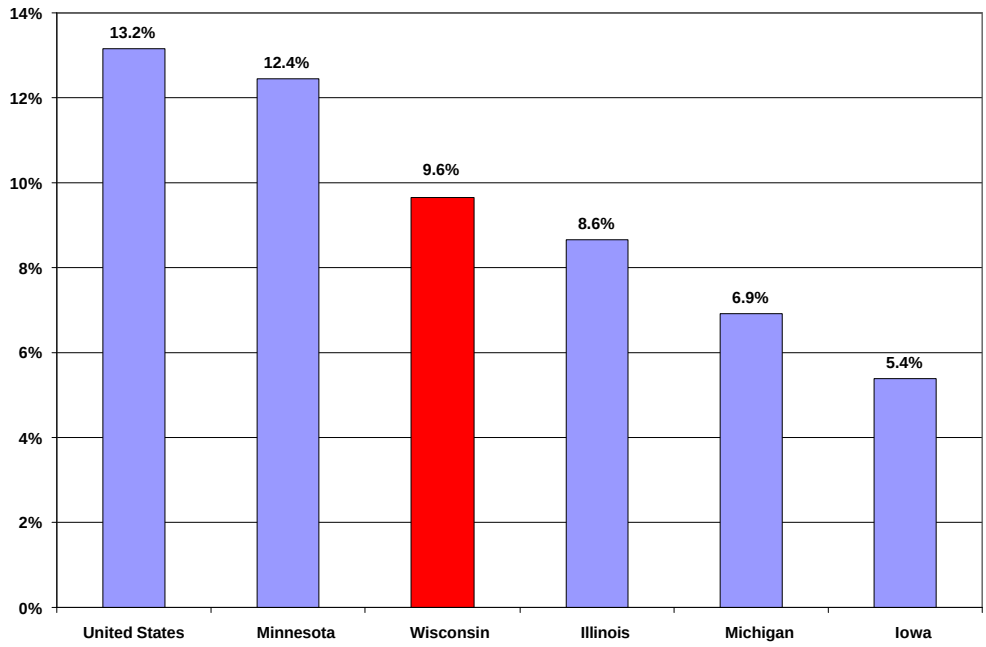
The following pages include the graphs and tables from the WISCOUNCIL presentation with brief analysis and implications to the Occupational Therapist profession. Much of the industry analysis applies to health care services in which the majority of O.T.'s are employed. ***This is not meant to be a technical paper, but rather an informal collection and discussion of demographic and occupational data that may affect career planning****.*

The majority of the data is from the U.S. Bureau of Census, 2000. The tables that show projected occupational growth in the state can be found on the web at: http://www.dwd.state.wi.us/lmi/projections.htm. *National data from the U.S. Bureau of Labor Statistics regarding the profession can be retrieved at* http://146.142.4.22/oco/ocos078.htm.

Many of the WISCOUNCIL participants have had questions regarding Occupational Therapy Assistants. Data is available for assistants and aides, but is not directly included in this summary. If you are interested in OTA information please contact me. I can be reached with any questions about the data and analysis at (608) 266-7034 or via e-mail at grosser@dwd.state.wi.us.

Regional Population Growth 1990-2000



Source: U.S. Bureau of Census, 2000, Summary File 1

Wisconsin experienced a fairly rapid rate of population growth (9.6 percent) between 1990 and 2000. It was not the fastest rate of decennial growth in recorded history but faster than the last two decennial (1970-80, 1980-90) rates of growth. The last decade's growth was equally fueled by in-migration, both foreign and domestic, and natural increase, defined as the total number of births in the state minus the number of deaths.

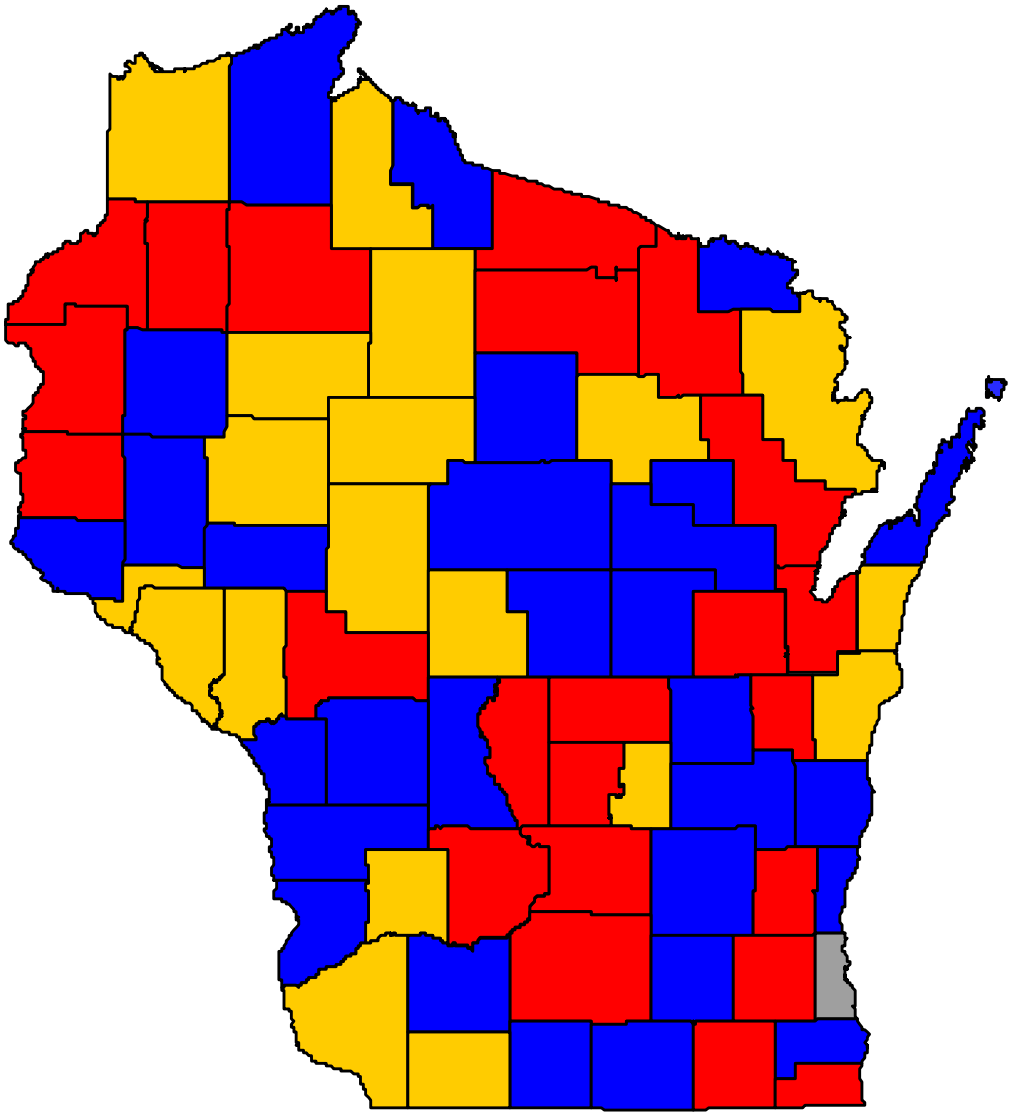
Despite the seemingly healthy rate of growth since 1990, both regionally and historically, it should be noted that the it lagged the growth rate relative to the national rate, and especially that of the "exploding" populations of the western and southeastern states such as Nevada, Colorado, Arizona, Georgia and North Carolina; all growing well over 20 percent , and as high as 66 percent, over the last ten years.

Why is population growth important? Conversely, why is population stagnation non-productive? Populations expand and contract for particular reasons that lie behind the simple explanations of people being born or dying or moving. In fact, births are definitely not the case in Wisconsin despite the perception of these being significant to the state's growth. People migrate to places for jobs, for aesthetic qualities, etc. In-migration, in turn, improves economies by necessitating jobs to service expanding populations. These jobs obviously demand labor.

Political strength in the national arena is also compromised if states' populations grow disproportionately more slowly. A quick reminder of this is that Wisconsin's nine U.S. Congressional districts have now become eight as the 2000 census results have compelled the state to consolidate its districts. Wisconsin , along with a other Midwestern states, has given up a portion of its political voice to other burgeoning states due to relatively slower rates of population growth.

1990 to 2000 Population Growth-State of Wisconsin

Source: U.S. Bureau of Census, 2000, Summary File-1



No growth

Less than or equal to 6.9% growth (significantly below state average growth)

Between 7% and 13% growth (within state average growth)

Greater than 13% growth (significantly above state average growth)

A county by county look at population dynamics paints a fairly explainable picture

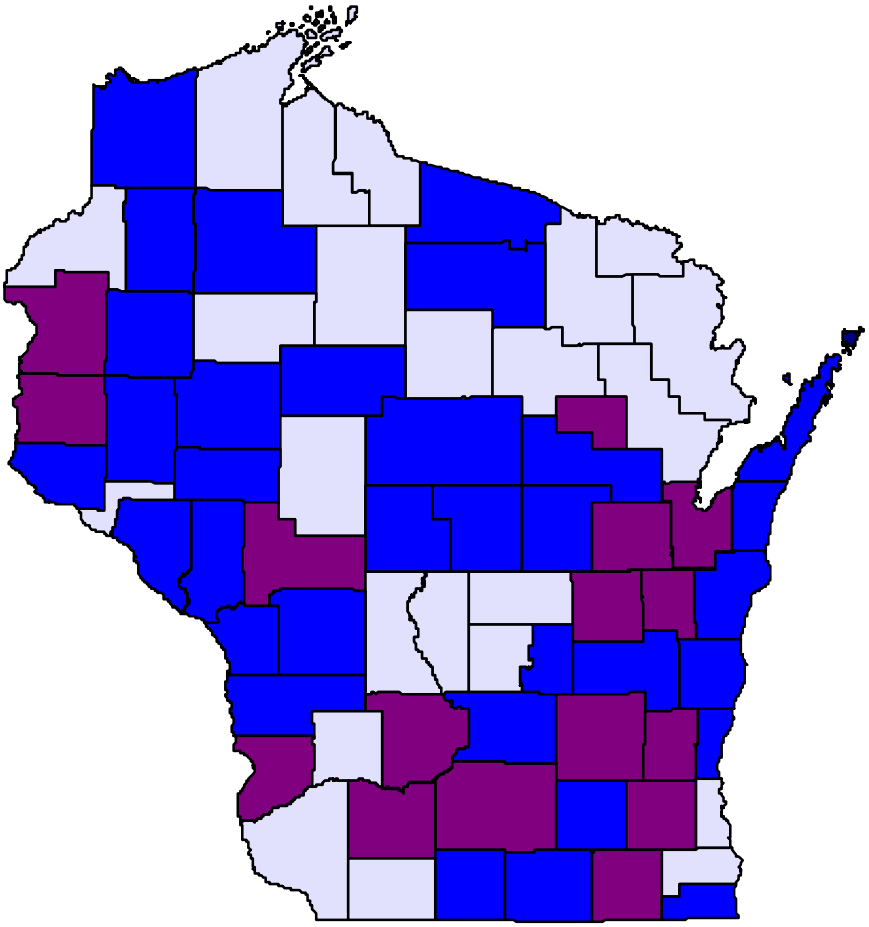
The counties shaded red grew at the **national** rate (roughly 13 percent) or faster. These counties tend to be metropolitan or are smaller counties that have strong economic ties to metro areas as evidenced strongly by the southeast and south-central portions of the state. Wisconsin counties bordering Minnesota's Twin Cities area have also seen a dramatic population increase due to in-migration of Minnesota natives. The fast growing counties in the extreme northeast and the central Wisconsin Dells area were propelled by an older population of retirees moving into these counties (coupled to a degree by an exodus of the younger population moving out of these areas and into metropolitan areas in and out of Wisconsin). The suburban counties of the Milwaukee metro area grew very fast as the only county to lose population in Wisconsin over the last decade, Milwaukee County, shed residents into these adjoining neighbors. Kenosha County, the most southeastern county in the state, has seen a huge influx of Illinois residents move into the county and keep their jobs in Illinois.

The counties shaded blue grew within the boundaries of the state's rate of growth.

The counties shaded yellow grew considerably more slowly than the state's rate of growth. Some counties in the southwest and northwest parts of the state, while experiencing slight growth over the last decade, have not even increased in population since 1900.

Population growth over the next decade is projected to be slower than the 1990-2000 period. A rate of six percent is expected and the significant factor of this growth will be in-migration rather than by natural increase.

Wisconsin Labor Force Participation Rate (1999)
Population 16 years and older
Wisconsin = 72.3% (U.S. rank 6th)
U.S. = 67.1%



Significantly Below Statewide Level (< 65.6 %)

Within Statewide Level (65.7% – 76.5 %)

Significantly Above Statewide Level (> 76.6%)

The **labor force participation rate (LFPR)** is a key measurement when looking at the labor market's performance. It is even more telling than the **unemployment rate**, which only measures the activity of the *labor force*- those 16 years and older and working or looking for work The unemployment rate equation is: [number of unemployed/ (number of employed + number of unemployed)]. The LFPR indicates those working or looking for work measured against the *entire civilian population 16 years and older* or [(number of employed + number of unemployed)/total civilian population 16 years of age and older].

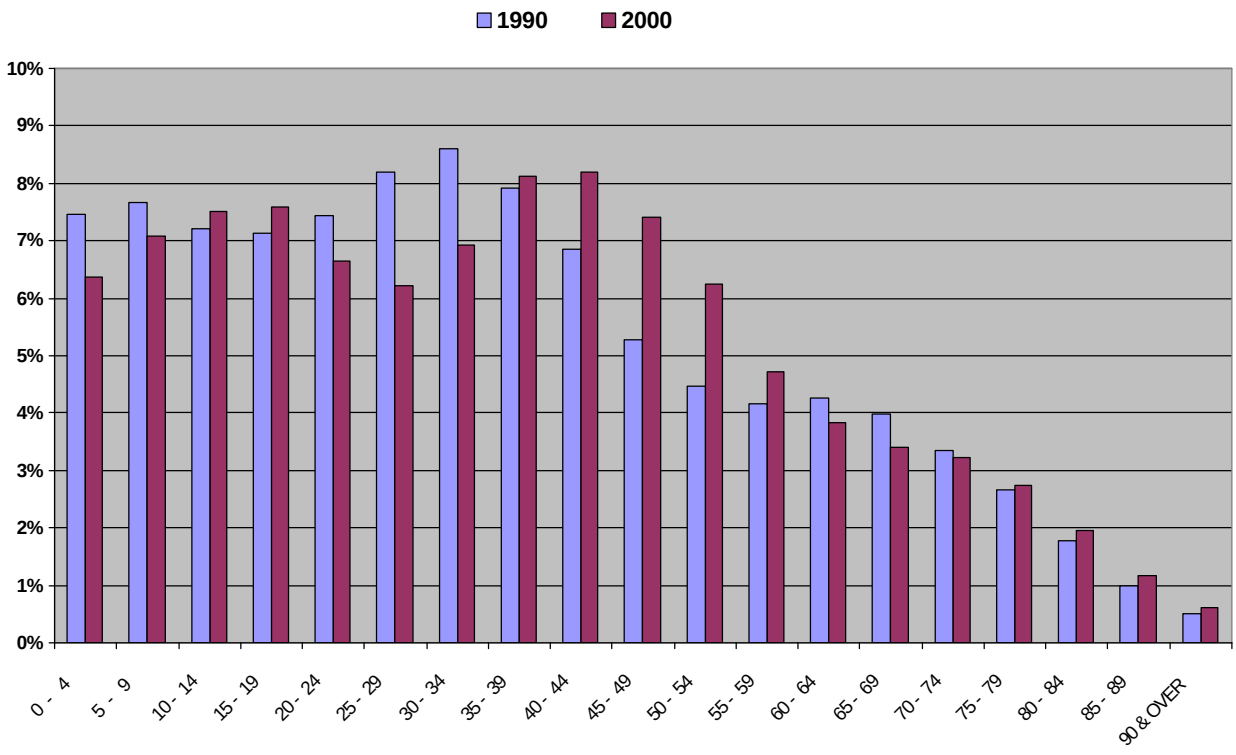
Wisconsin has had a high LFPR for many years; usually ranked in the top five or ten highest annually. Its female LFPR is even higher *ranked* nationally than the overall figure. Most likely, the state's LFPR peaked in the late 1990's (save for the occasional slight increase from one year to the next) and will probably remain flat or will decrease over the foreseeable future.

The chief reason for LFPR stagnation and decline is not purely economic; it is chiefly demographic. There are three possible situations for a person who is labor force eligible (16 years and older): a) they are working, b) they are not working but are looking for work , and c) they are not working and are not looking for work. Wisconsin is generally seeing an increasing number of residents in item "c". That is, they are neither working nor are technically unemployed; they are leaving the labor force altogether. The chief reason for this is that many are retiring from their careers or are newly moved into Wisconsin after retiring from jobs elsewhere. If they are no longer in the labor force they are not technically unemployed by definition.

The map shows metro area counties with higher LFPR compared to the more rural counties. The exceptions being Milwaukee and Racine Counties, which have central city locations which tend to have lower LFPR. Counties known to be popular retirement locations, some that will systematically need boosted resources towards health services and workers, coincidentally, have lower LFPR.

It should be noted that because an area's LFPR is low does not necessarily mean that job growth is low, too. This is especially true in some of the northern retiree-laden counties where the local economies have started to cater to the newer, older population by creating and expanding businesses in transportation, financial services, amusement and recreation businesses and very importantly, health services. Labor shortages in all of these industries are pervasive and are predicted to become more acute as many more leave the labor force coupled with the younger-aged moving away from these counties.

Wisconsin Age Cohorts as a Percentage of Total Population 1990 and 2000



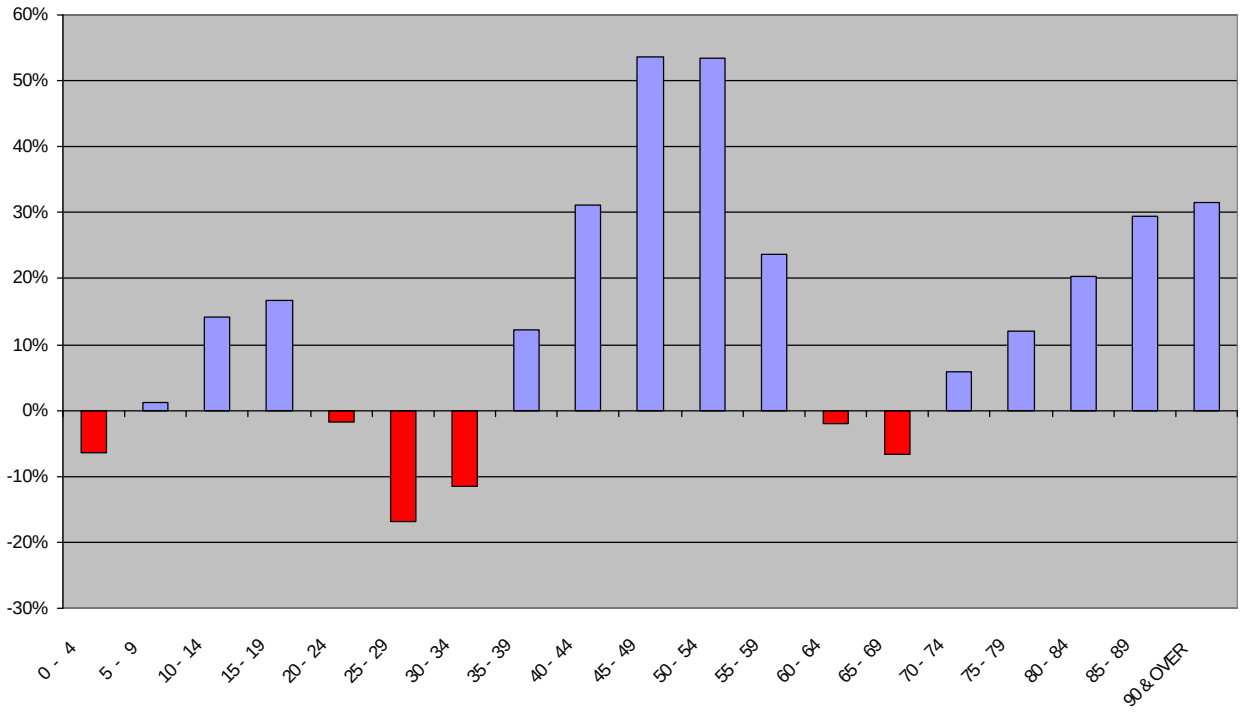
Source: U.S. Bureau of Census, 2000, Summary File-1

The graph above shows the largest portion of the 1990 population in Wisconsin in the 25 to 39 year old, combined age cohorts. They have since aged a decade and are present in the 35 to 49 year old groups, now the largest in representation. This has been coupled with a sharp decrease in the *percent representation and number* of those aged 20-34 in year 2000 as well as those aged 0-9 years of age, making this disparity keener.

It is undeniable that the state's population is aging and it is aging in some counties faster than others. This is not unique to Wisconsin or the Upper-Midwest. Aging population is a national and international phenomenon caused by proportionately fewer younger people than there were a half-generation ago. The key issue is how the state (and nation) is going to respond in "making do with less". That is, dealing with fewer workers to replace those who have retired, having fewer people to fill key positions that will be in demand as the changing demographics impact our entire economy (health care industry workers) . Where will resources ($), both personal and public, be allocated? It is fair to say that the $100 I spend today on entertainment will be the $300 I spend on health care tomorrow. In short, our collective "basket of purchased goods and services" is changing and will be quite different tomorrow.

Now consider these quick items: job growth across virtually every service-oriented industry has been tremendous over the last decade, save recession year 2001, but growth nonetheless. There is longer life expectancy. There will be more golden retirement years per retiree than in previous generations. The disparity in the number of jobs to workers and very importantly, skilled workers is already here. How this continues to play out, especially in the northern counties of the state, is speculated to become more acute through the next two to three decades.

Wisconsin Age Cohort *Percent Change* 1990 to 2000



Source: U.S. Bureau of Census, 2000, Summary File-1

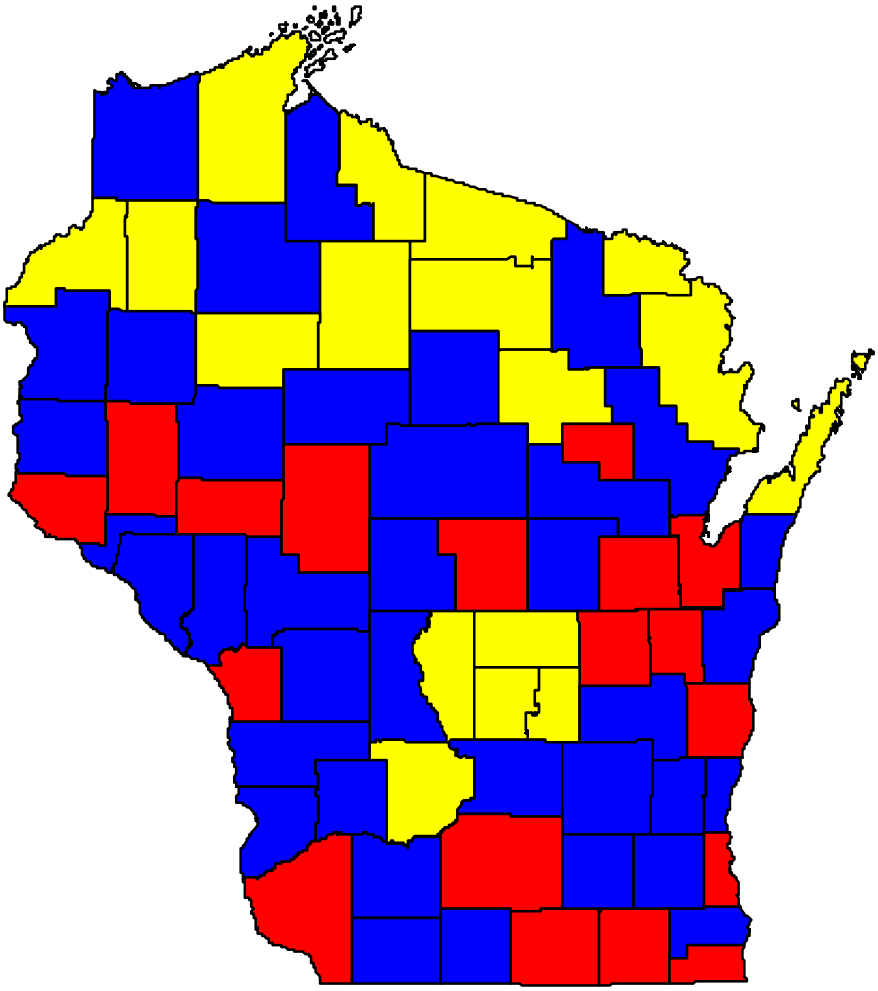
This is another view of the graph from the previous page but shows the *percent change* in the number of those in the designated five year age cohorts from 1990 to 2000. Simply put, Wisconsin saw huge growth in the pre-retirement age cohorts from the baby boomers, without corresponding growth (in fact, loss) in generation X. And because there was no growth in in those 20 to 34 years of age, they did not produce the children at the previous rate as seen in the loss of those aged zero to four years of age. A reminder that this is percent change relative to the proportions a decade ago in each age group.

Now here are some quick, eye opening facts: the age cohort 20 to 24 saw a gain of seven (yes...seven) men in the state over the last decade and a loss of 6,684 women. The age cohorts for both genders 25 to 34 years lost 115,632 relative to 1990 and was weighted heavily in female loss. Why is all of this important? Why the gender disparity? It is not as if there were significantly more men born in the state 20-30 years ago. There has been discussion regarding the loss of college graduates in the state, otherwise known as the "brain drain". This discussion is leading to further study in educational demographics. We have known that women are more likely to go to college. We now know that women are more likely to graduate from college. In light of female population loss, it has been widely speculated that women, especially women with education, are leaving Wisconsin for greener pastures of higher pay in jobs that are more closely aligned with their fields of study. Readers do not need me to remind them that the field of Occupational Therapy is predominantly filled by women.

It is imperative to Wisconsin's future to keep the younger and skilled/educated population in-state. While health care workers are certainly some of the most demanded, presently, they will be more so in the future. We (educators, employers, etc.) must do a better job of marketing Wisconsin as a viable place to live and work, not only to those born and bred here, but to those from other locales well, because it is not anticipated that the outward flow of the younger population will cease soon. The idea to aggressively retain and attract labor is not so far fetched as the upcoming graphs and tables will show that the future generation will not be born in abundance in Wisconsin.

How Has Wisconsin Aged?

Counties by Median age
State of Wisconsin = 36.0 years of age
United States = 35.3 years of age



27.7 to 35.9 years of age

36 to 39.9 years of age

40.0 to 45.8 years of age

Source: U.S. Bureau of Census, 2000

This map, like the other state maps presented in this forum, has fairly similar shading patterns. The difference is that this directly shows the age patterns within the state as the other maps only to eluded this. The title of the map to the left is a bit misleading as it does not show the aging process comparing one year's data to another. It is implied that most of these counties have aged significantly via median age.

The median age shows the midpoint age of a given county. There are equally as many people younger and older than this mid-point. This should not be confused with the average age of the county which may be higher or lower than the median.

There are no surprises in any of this mapping, except for some of those red-shaded counties in the far west reaches near the Twin Cities border where it would almost be assumed that they share the older characteristics of the more northern yellow shaded counties. A probable reason they take on younger characteristics is the collegiate community presence within the counties, which are large havens for younger populations.

The red-shaded counties are for these purposes, younger than the state median age (and considered closer to the U.S. median). Many of the red counties are home to metro areas or are counties tied to metro areas. Some counties, though, are like Grant County in the extreme southwest part of the state Grant County has a median age of 35.9 and is probably the most rural county in the state to exhibit such a younger characteristic. The presence of the University of Wisconsin-Platteville has a lot to do with this.

So what do the location and frequency of yellow-shaded counties tell the reader? Obviously, that they are collectively older than the state and the nation. But why? The age of an area tells a great deal about those who inhabit the area, but it can also speak volumes about those who do not reside there anymore So far, a great deal has been made about areas that have a had a significant in-migration of retirees and older residents. Combine this with the out-migration of those in the younger age groups and the median age is definitely accentuated upwards. And again, as it cannot be said enough, the need for workers in particular industries such as health care will be acute. Where will these workers be found if those who are younger and /or skilled are leaving these counties?

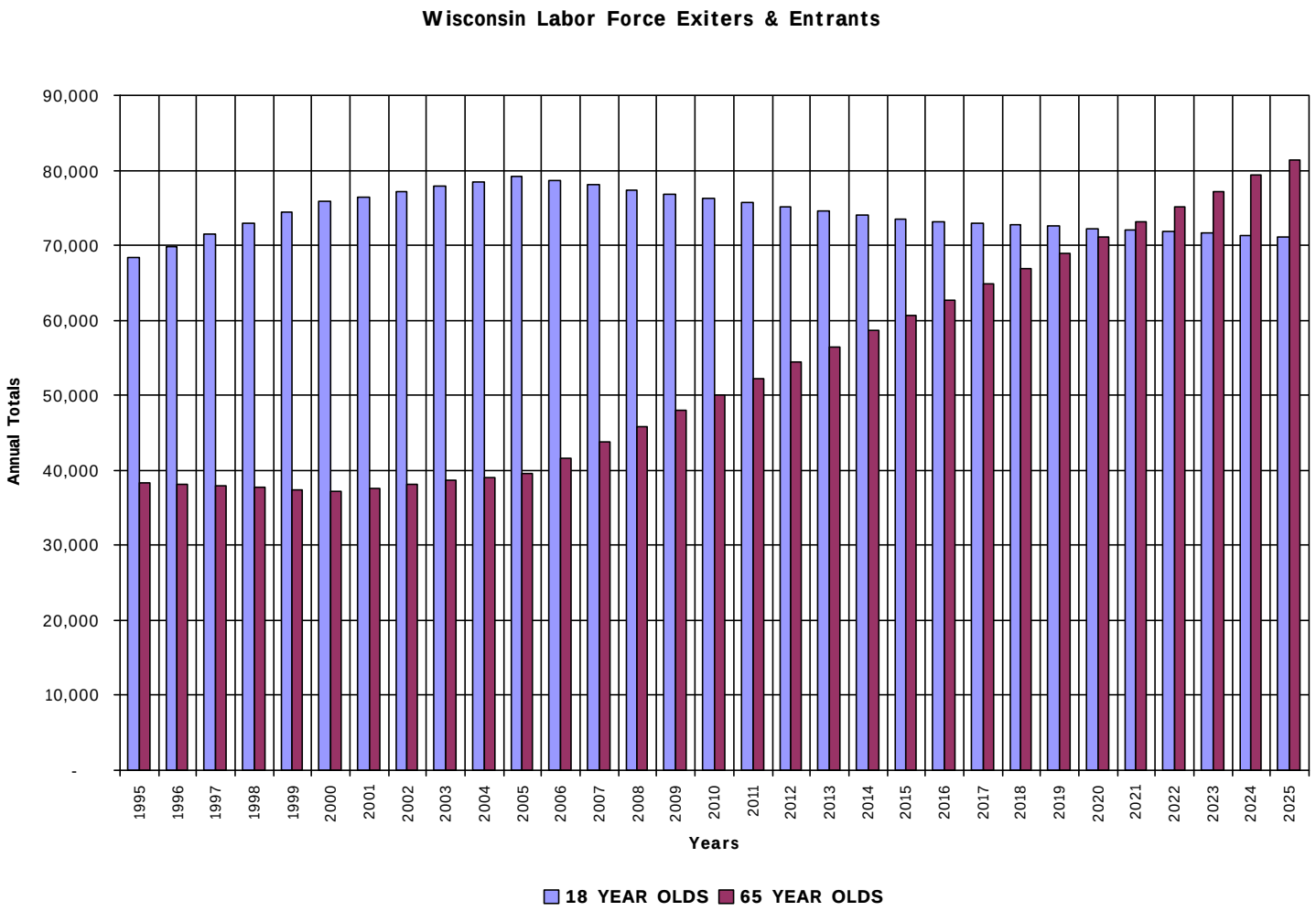
United States Birth Rate-2000

		Number of Births	Birth Rate	Fertility Rate
1	District of Columbia	7,666	14.8	63
2	Mississippi	44,075	15.8	70.3
3	Texas	363,414	17.8	80
4	Arizona	85,273	17.5	84.4
4	Arkansas	37,783	14.7	69.1
5	New Mexico	27,223	15.6	72.7
6	Georgia	132,644	16.7	71.4
7	Alabama	63,299	14.4	65
8	Nevada	30,829	16.4	79.8
9	Louisiana	67,898	15.5	69.1
10	Tennessee	79,611	14.4	65.2
11	South Carolina	56,114	14.3	63.3
12	Oklahoma	49,782	14.7	69.9
13	North carolina	120,311	15.5	71.6
14	Kentucky	56,029	14.1	63.6
15	Florida	204,125	13.3	66.9
16	Delaware	11,051	14.5	63.5
17	Indiana	87,699	14.7	66.8
18	**Illinois**	**185,036**	**15.2**	**69.5**
19	Colorado	65,438	15.8	73.1
20	Missouri	76,463	13.9	64
21	California	531,959	15.8	70.7
	United States	**4,058,814**	**14.7**	**67.5**
22	West Virginia	20,865	11.6	55.9
23	Ohio	155,472	13.8	63
24	Kansas	39,666	14.9	69.2
25	Hawaii	17,551	14.9	72.3
26	Oregon	45,804	13.7	65.8
27	Idaho	20,366	16	74.8
28	Alaska	9,974	16	74.6
29	Maryland	74,316	14.2	61.9
30	Virginia	98,938	14.2	61.2
31	Wyoming	6,253	13	62.7
32	Utah	47,353	21.9	94.5
33	**Michigan**	**136,171**	**13.7**	**62**
34	Rhode Island	12,505	12.6	58.1
35	Washington	81,036	13.9	63.2
36	Nebraska	24,646	14.8	68.9
37	South Dakota	10,345	14	66.7
38	Montana	10,957	12.3	61.3
39	New York	258,737	14.2	65
40	Pennsylvania	146,281	12.2	58.2
41	**Iowa**	**38,266**	**13.3**	**64**
42	**Wisconsin**	**69,326**	**13.1**	**60.4**
43	Connecticut	43,026	13	61.2
44	New Jersey	115,632	14.1	65.8
45	**Minnesota**	**67,604**	**14**	**63.8**
46	Maine	13,603	10.8	49.5
47	North Dakota	7,676	12.2	58.7
48	Massachusetts	81,614	13.2	59.2
49	Vermont	6,500	10.9	48.8
50	New Hampshire	14,609	12	52.2

Birth and fertility rates in Wisconsin and the rest of the upper Midwest are much lower than the national average and pale in comparison to states in the western U.S. It is my belief that people try to explain these dynamics through much too complex, sociologically-based answers such as race, economic standing, educational attainment, etc. While these are marginally true, I feel the reason is very simple: Wisconsin's population is older and, in a very braod view, is past the life-stage point of having children. Wisconsin ranks 41st in the country in birth rate (per 1,000 total population). Its *total* fertility rate, which is not the same fertility rate displayed in the table to the left, assumes that at present rates women between the ages of 15-44 will average 1.9 births in their lifetime. This rate is below the "replacement of parents" fertility rate of just about 2.1 births (this accounts for infant mortality).

Why are these rates important? First of all, these low and declining rates are certainly not new phenomena. Birth rates have declined steadily since the early 1980's and are not projected to climb significantly any year soon. Without the larger volume of births a generation ago to replace an aging and labor force-detached population, the infrastructure established by present generations will come upon a labor disparity. Again, health care services will be a focal industry bearing the double-whammy brunt of this disparity. Mainly in the increased demand for health care services, and secondly, the speculated shortage of replacements of those retiring from this industry.

Where occupational therapy falls into this pattern will be elaborated shortly .

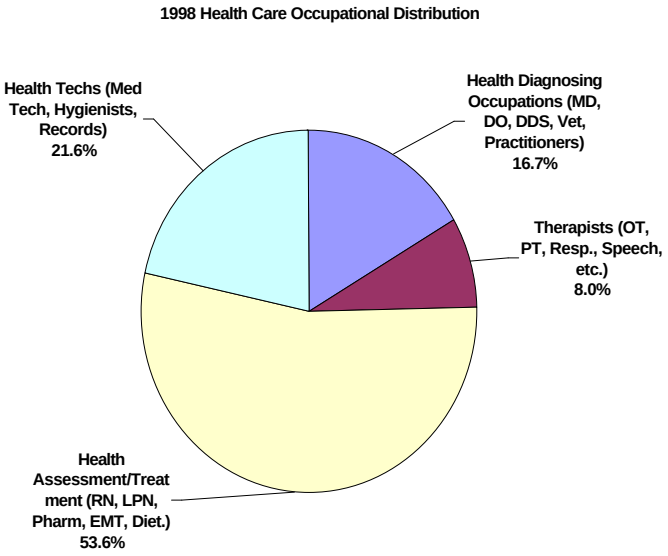


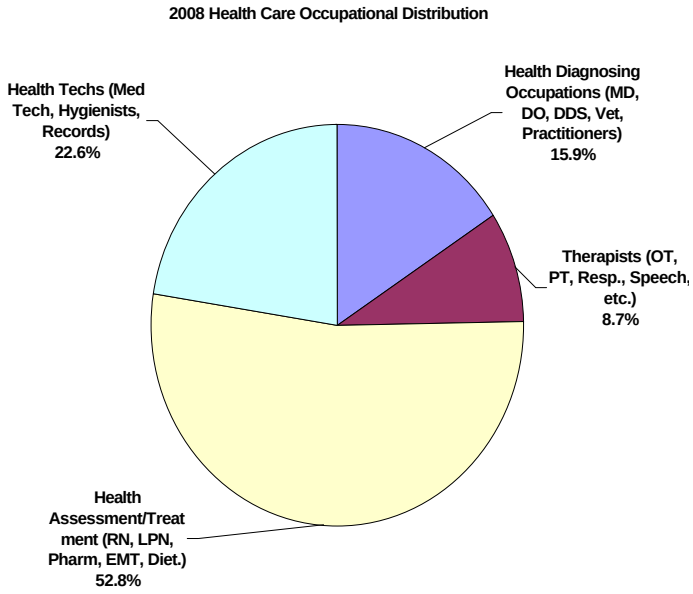
The past and present trends have been established in the past few pages. What does this mean for the future? The graph above is, in my opinion, the ultimate picture of the aging demographics presented in the previous pages.

The graph shows the number of 18 year olds in Wisconsin versus the those who are 65 years of age; indicating these single years of age from 1995 to 2025. This is a compelling picture. In the not too distant future, Wisconsin will have more people turning 65 than 18 on an annual basis.

The individual years, 18 and 65, were chosen as arbitrary points of labor force entrance and exit, respectively. Of course, these are wide open to dispute as people retire earlier than age 65 and many do not enter fully into the labor force until well into their 20's. But for the purposes of this brief analysis, one will notice the present surplus of the younger to the older and that this will only last for the short term as the first baby boomers turn 65 in 2010.

If this does not demonstrate the projected age disparities, what will?

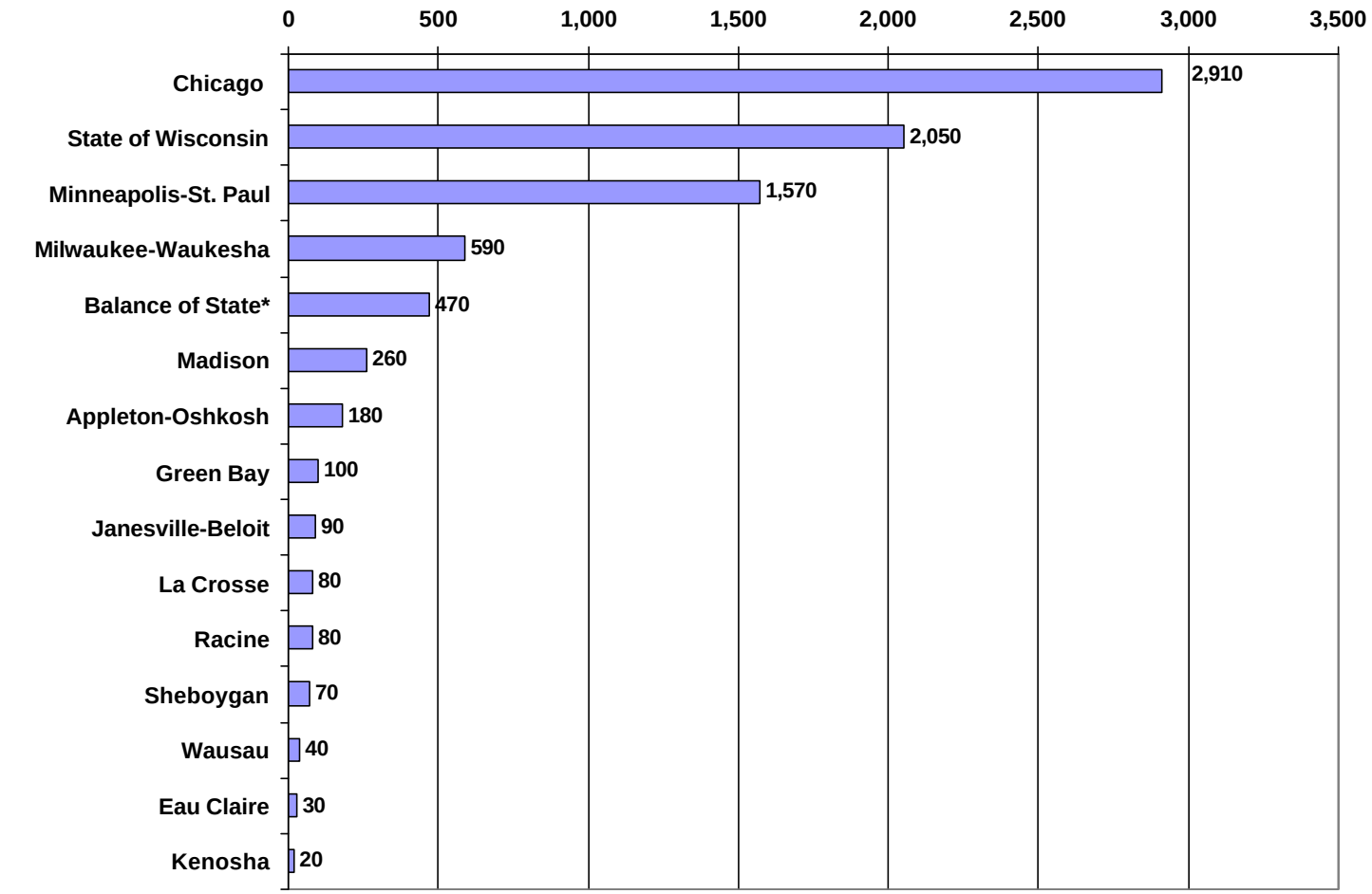




These two graphs compare the distributions of specific occupational groupings within the broad health care practitioners classification in 1998 and projected to 2008. These graphs' statistical modeling only looked at the projected employment without consideration to *speculated or anecdotal* increased (or decreased) demand so it is feasible that acute spikes in real demand could nullify these projections. The therapists grouping, which also includes speech and physical therapists, is the smallest grouping but shows growth as a portion of total health care employment.

These graphs are not startling figures of health care employment. The purpose of this is to give perspective to where resources are allocated, where employment recruiting/retention is or should be directed. This does not in any way mean that efforts should be ignored to the therapy occupations because they are the smallest contingent.

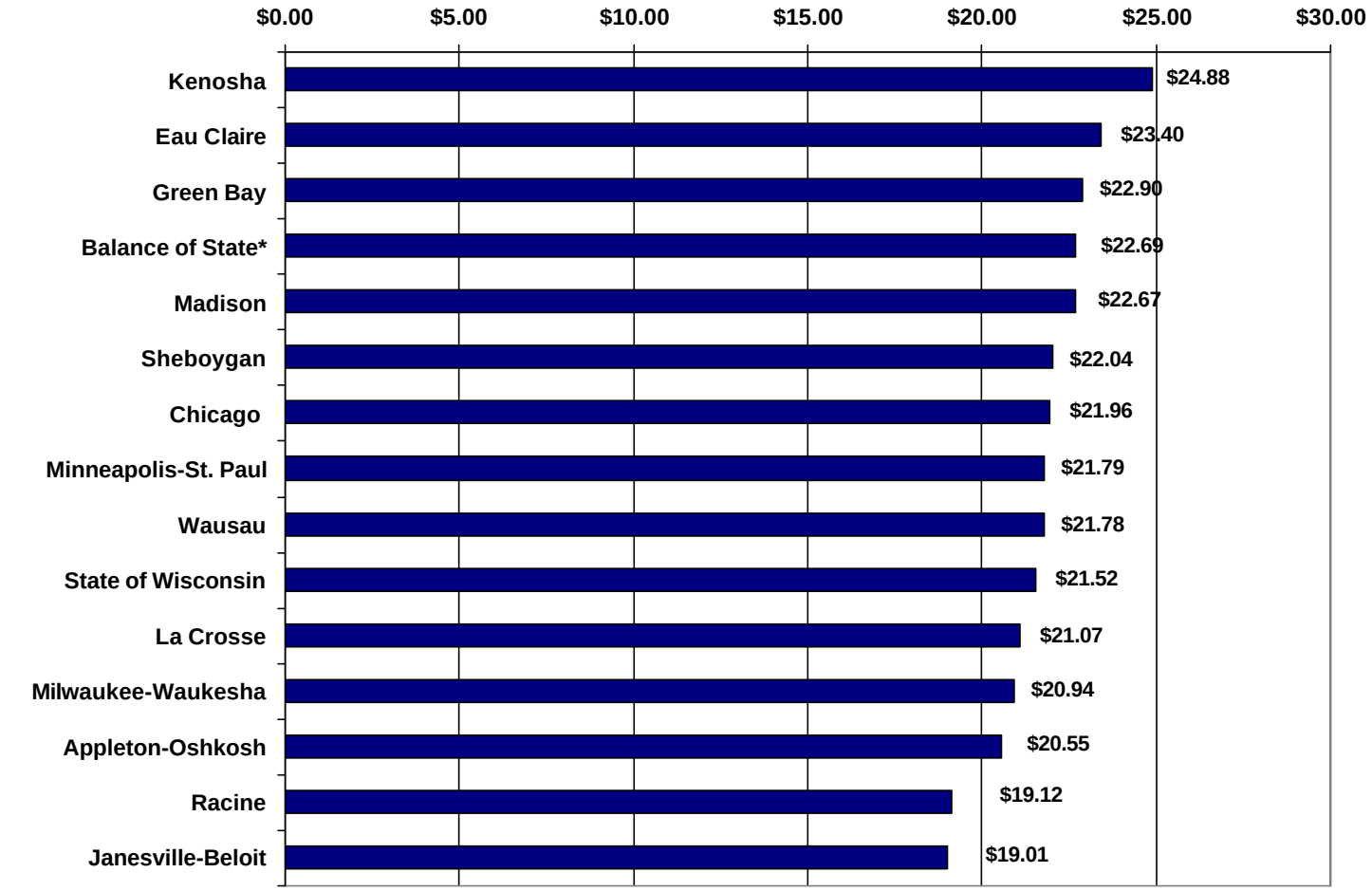
Regional Occupational Therapist Employment-2000



Source: U.S. Bureau of Labor Statistics and DWD, 2002

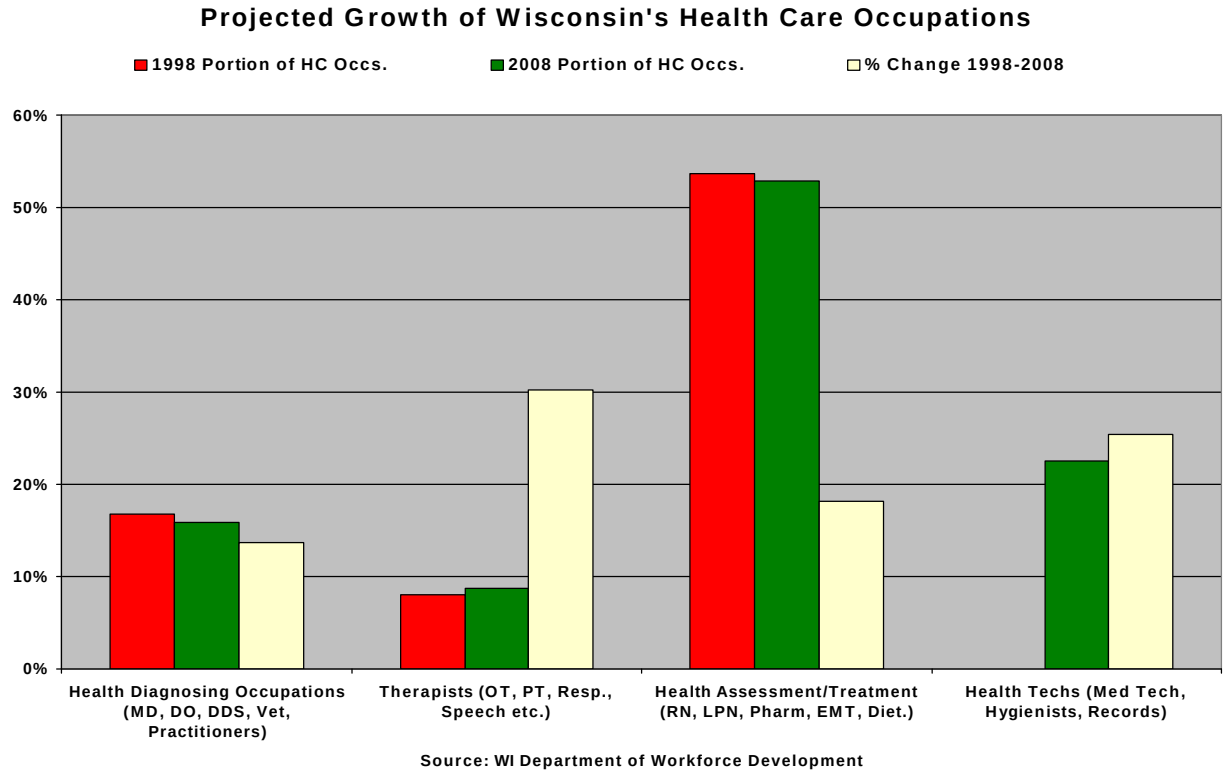
The above displays the number of occupational therapists by locale in this immediate region. The item "balance of state" is the aggregate of counties in the state that are not deemed metropolitan statistical areas (MSA). The majority of Wisconsin's MSA are single county with the exception of Eau Claire (Eau Claire and Chippewa Counties), Milwaukee-Waukesha (Milwaukee, Ozaukee, Washington and Waukesha Counties) , La Crosse (La Crosse County, WI and Houston County, MN) and Appleton-Oshkosh (Calumet, Outagamie and Winnebago Counties). Interestingly and not so surprisingly, the Chicago and Twin Cities markets are huge relative to Wisconsin markets and provide numerous opportunities for occupational therapists. But that is not say that Wisconsin does not or will not offer opportunities as well. In fact, it would behoove the educators in our state to absolutely solidify networking resources within our state and emphasize the retention of our OT grads. One thing that is not apparent about Wisconsin looking at this graph is that Wisconsin is one of the most "geo-economically" diverse states in the U.S. This means that our population and economic bases are spread out over the state and not concentrated in gigantic metro areas like Chicago in Illinois and the Twin Cities in Minnesota. In fact, Wisconsin is less than half the size of Illinois via population and Wisconsin has more metropolitan areas. This fact is an asset to the health care industry that tends to cluster tightly in metro areas. Older populations are moving to more rural locations but can still remain proximal to services in metro areas. Many overtures of attaching health care into more rural settings, particularly in northern Wisconsin, have been brought to the table especially in the Wausau area and the Wisconsin counties close to Minnesota. Of course finding the labor to work in these areas will be challenging on many levels but these challenges are economic opportunities, regardless.

Regional Occupational Therapist Median Hourly Wage-2000



Source: U.S. Bureau of Labor Statistics and DWD, 2002

The year 2000 median hourly wage paid to occupational therapists in Wisconsin, $21.52, is well above the state median wage for all occupations in the state, $13.16 and above the average hourly wage for health services industry employment, $17.90. This next revelation is surprising: select Wisconsin MSA wages are higher paying than those of the Chicago and Twin Cities metro areas. This is very encouraging because 1) it is no secret that the state loses many of its skilled and educated workers to these areas because of job opportunities and their relatively higher wages that they pay, and 2) because it is feared that Wisconsin is losing a disproportionate number of educated females to locales outside of the state; much faster than the loss of males. Knowing that the field of occupational therapy is dominated by women makes these data all too salient.



The lighter shaded yellow columns on the graph show the projected occupational growth from 1998-2008. The red and green bars show the percent representation of these specific health care occupational groupings relative to the entire broad collection.

Therapist occupations will be the largest gainers over the short-term in Wisconsin. They will still comprise the smallest group within the health care practitioners. Occupational therapists numbered 2,130 in 1998 and are expected to increase to 2,740 by 2008, a 610 job and 30 percent increase.

When I first looked at these projected O.T. figures, I felt they were conservative. Though the projected increase is strong, I think demand will be stronger. Unfortunately, a perfect world is the only place where supply and demand usually meet. Roadblocks such as managed care decisions to tighten spending on many outpatient services have certainly become part of the equation when projecting these figures. Recent federal landmark decisions such as loosening spending on Alzheimer's Disease care may mitigate the factors that dampen an increase in O.T. employment, but it may take time for this to be realized.

According the U.S. Department of Labor, The O.T. job itself is changing. Nationally, one in six O.T.'s works part-time. O.T.'s are taking more of a managerial role whereas O.T. assistants and aides are now taking on a larger share of the hands-on work. The workplace for O.T.'s is becoming less traditional and is definitely losing its place in hospital settings, preferring clinical settings and even on-site set ups working with businesses. Many O.T.'s are working on a contract basis.

The following two pages are tables available from a larger occuaptional information source from DWD. They may be accessed at this web address: http://www.dwd.state.wi.us/lmi/

Figure 2.3: Wisconsin 30 Largest Industries, Ranked by Projected 2008 Employment

Industry Title	1998 Estimated Annual Average Employment	2008 Projected Employment	1998-2008 Employment Change	1998-2008 Percent Change
Health Services	224,900	270,430	45,530	20.2%
Educational Services	235,470	267,430	31,960	13.6%
Business Services	134,910	182,800	47,890	35.5%
Eating and Drinking Places	165,340	181,280	15,940	9.6%
Local Government, ex. Education & Hospital[(1)]	120,910	134,970	14,060	11.6%
Industrial Machinery and Equipment	115,490	115,800	310	0.3%
Social Services	70,470	95,600	25,130	35.7%
Wholesale Trade, Durable Goods	79,180	87,180	8,000	10.1%
Miscellaneous Retail Stores	68,660	82,840	14,180	20.7%
Special Trade Contractors	72,570	81,520	8,950	12.3%
Membership Organizations	65,720	76,000	10,280	15.6%
Fabricated Metal Products	68,770	73,100	4,330	6.3%
Food Stores	64,460	68,200	3,740	5.8%
General Merchandise Stores	61,580	66,000	4,420	7.2%
Wholesale Trade, Nondurable Goods	57,230	65,620	8,390	14.7%
Food & Kindred Products	64,990	64,900	-90	-0.1%
Auto Dealers & Service Stations	55,560	61,400	5,840	10.5%
Printing & Publishing	55,220	61,000	5,780	10.5%
Trucking and Warehousing	51,610	55,680	4,070	7.9%
Paper & Allied Products	53,020	53,700	680	1.3%
Engineering & Management Services	37,060	51,520	14,460	39.0%
Insurance Carriers	45,110	48,700	3,590	8.0%
Electronic & Other Electrical Equip	46,440	47,600	1,160	2.5%
Depository Institutions	43,330	46,200	2,870	6.6%
Rubber & Misc Plastics Products	37,120	43,800	6,680	18.0%
Amusement & Recreation Services	28,860	39,090	10,230	35.4%
State Government, ex. Education & Hospital[(1)]	34,100	38,370	4,270	12.5%
Hotels & Other Lodging Places	29,530	36,750	7,220	24.4%
Lumber and Wood Products	31,220	33,200	1,980	6.3%
Transportation Equipment	32,550	32,800	250	0.8%

[(1)]State and local government employment in education and hospitals is removed and included with Educational Services (SIC 82) and Health Services (SIC 80).
Employment rounded to nearest 10.
Numbers may not add due to rounding.
Employment derived using data from 1998 Current Employment Statistics (1999 Benchmark), 1998 Covered Employment and Wages, and unpublished data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau.
Source: DWD, Bureau of Labor Market Information and Customer Services, Projections Unit

Figure 3.14: Wisconsin Detailed Occupational Trends – 1998 to 2008 (continued)

	Estimated Employment				Estimated Annual Openings		
Occupational Title	1998	2008	Growth	% Change	Growth	Separations	Total
Political Science Teachers	180	220	40	22.2%	0	10	10
Psychology Teachers	330	390	60	18.2%	10	10	20
Social Sciences Teachers	240	290	50	20.8%	10	10	20
Business Teachers	780	930	150	19.2%	20	20	40
Law Teachers	10	10	0	0.0%	0	0	0
Criminal Justice Teachers	100	120	20	20.0%	0	0	0
Social Work Teachers	10	20	10	100.0%	0	0	0
Education Teachers	1,010	1,200	190	18.8%	20	30	50
Philosophy/Religion Teachers	250	300	50	20.0%	10	10	20
Library Science Teachers	40	40	0	0.0%	0	0	0
Parks/Recreation/Leisure/Fitness	90	130	40	44.4%	0	0	0
Home Economics Teachers	120	100	(20)	-16.7%	0	0	0
Postsecondary Teachers, NEC	7,570	9,040	1,470	19.4%	150	210	360
Teachers & Instructors	111,420	130,350	18,930	17.0%	1,890	2,440	4,330
Teachers, Preschool	7,110	9,050	1,940	27.3%	190	150	340
Teachers, Kindergarten	3,030	3,350	320	10.6%	30	70	100
Teachers, Elementary School	34,900	38,140	3,240	9.3%	320	810	1,130
Teachers, Secondary School	34,570	41,310	6,740	19.5%	670	1,100	1,770
Teachers, Special Education	8,640	11,280	2,640	30.6%	260	70	330
Teachers & Instructors, VocED	7,500	8,250	750	10.0%	70	80	150
Instructors, Adult (Non-VocEd)	2,700	3,340	640	23.7%	60	30	90
Instructors & Coaches, Sports	6,760	8,620	1,860	27.5%	190	70	260
Farm, Home Mgmt Advisors	440	460	20	4.5%	0	10	10
Teachers & Instructors, NEC	5,760	6,560	800	13.9%	80	60	140
Librarians/Archiv/Curators and Other	22,880	27,920	5,040	22.0%	510	390	900
Librarians	3,740	3,890	150	4.0%	20	100	120
Library Technicians	1,700	1,970	270	15.9%	30	50	80
Audio-Visual Specialists	270	250	(20)	-7.4%	0	0	0
Curatrs/Archiv/Museum Techs	250	290	40	16.0%	10	10	20
Counselors, Vocation/Education	3,370	4,070	700	20.8%	70	80	150
Instructional Coordinators	1,610	1,930	320	19.9%	30	20	50
Teacher Aides, Paraprofessional	11,940	15,520	3,580	30.0%	360	140	500
Health Practitioners/Techns/Rel Wkrs	131,410	157,610	26,200	19.9%	2,620	2,420	5,040
Health Diagnosing Occupations	21,990	25,000	3,010	13.7%	300	390	690
Physicians and Surgeons	12,730	14,670	1,940	15.2%	190	200	390
Dentists	3,860	3,680	(180)	-4.7%	(20)	80	60
Optometrists	940	960	20	2.1%	0	20	20
Podiatrists	220	230	10	4.5%	0	10	10
Chiropractors	2,130	2,440	310	14.6%	30	40	70
Veterinarians	1,550	2,060	510	32.9%	50	30	80
Health Practitioners, NEC	560	960	400	71.4%	40	10	50
Therapists	10,570	13,770	3,200	30.3%	320	160	480
Respiratory Therapists	1,460	2,130	670	45.9%	70	20	90
Occupational Therapists	2,130	2,740	610	28.6%	60	30	90
Physical Therapists	2,320	2,860	540	23.3%	50	40	90

Employment rounded to the nearest 10.
Employment under 5 is rounded to 0.
Totals may not add due to rounding.
Employment derived using 1998 OES/Wage data and unpublished data from the U.S. Bureau of Labor Statistics and
U.S. Census Bureau.
Source: DWD, Bureau of Labor Market Information and Customer Services, Projections Unit

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